

transmitted light by said polarizing beam splitting surface so that the transmitted light is directed to said other surface and the transmitted light is caused to pass through said one surface by reflection by said reflection surface.

a half wavelength plate for causing polarizing directions of the transmitted light and the reflected light which have been splittiby said polarizing beam splitting surface to be mutually coincident; and

wherein one of said transmitted light and said reflected light is once passed through [a] said half wavelength plate to rotate the polarizing direction by 90 degrees,

whereby the polarizing directions of said transmitted light and said reflected light are made to be mutually coincident.

## **REMARKS**

### I. Introduction--Claim Status

This amendment under 37 C.F.R. §§1.116 is submitted in response to the outstanding Office Action of April 26, 1999, and is accompanied by a Petition for Extension of Time with fee. A Notice of Appeal is also filed concurrently herewith.

The Office Action indicates that claims 36-105 are pending, and that claims 43-59 and 92-105 have been withdrawn from consideration. Applicant gratefully acknowledges the Examiner's indication that claims 43-49 and 71-91 would be allowable if rewritten to overcome the § 112 rejections set forth in the Office Action and to include all the limitations of the base claim and any intervening claims. Claims 36, 43, and 71 are herein amended for clarity and, particularly, claims 43 and 71 have been amended to include the limitations of the base claim and any intervening claims.

Applicant respectfully requests reconsideration in view of the herewith presented amendments and remarks.

### II. The 35 U.S.C. § 112, ¶ 2 Rejection

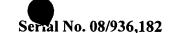
Claims 36-56 and 71-91 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Office Action states that (i) "said substrate" in claim 36 lacks proper antecedent basis, and (ii) "a half wavelength plate" in claim 71 is vague, indefinite and/or confusing (noting claim 36, line 8).

Applicant respectfully submits that these §112 rejections are obviated and rendered moot by Applicant's amendment to claims 36 and 71. Accordingly, Applicant respectfully requests withdrawal of the claim rejections under 35 USC § 112, ¶ 2.

# III. The Prior Art Rejections

Based on a single prior art reference to Geffcken et al., the Office Action rejects (i) claims 36 and 50 under 35 U.S.C. 102(b) as being anticipated, and (ii) claims 37-42 and 51-56 under 35 U.S.C. 103(a) as being obvious. Applicant respectfully traverses these rejections.

Claim 36 requires, *inter alia*, "a half wavelength plate for causing polarizing directions of the transmitted light and the reflected light which have been split by said polarizing beam splitting surface to be mutually coincident". Applicant respectfully notes that—contrary to the position set forth in the Office Action (*see, e.g.*, Office Action at ¶2)—element 45" shown in Fig. 5 of Geffcken et al. is not a half-wave plate, but is a quarter-wave plate. Accordingly, at least for this reason, Applicant's claimed invention



(claim 36) is structurally distinguishable over Geffcken and thus cannot be said to be anticipated thereby. Additionally, Applicant notes that in Geffcken the function of the half-wave plate 45 shown in Fig. 3 is provided by the combination of quarter-wave plate 45" and reflecting surface 49' such that the light beam passes through the quarter-wave plate 45" twice by action of the reflecting surface 49' to result in an overall half-wavelength shift (i.e., two quarter wavelength shifts).

Simply, Geffcken et al. does not disclose or suggest a polarizing device having a half wavelength plate so as to cause the polarizing direction of the transmitted and the reflected light which have been split by the polarizing beam splitting surface to be mutually coincident, as recited in Applicants' claimed invention (claim 36). Thus, at least for these reasons, Applicant's claimed invention (claim 36) is patentably distinct over Geffcken et al. Claims dependent on claim 36 are thus also patentable for at least these reasons; however, Applicant further submits that claims dependent on claim 36 add limitations which provide for additional patentable distinction(s) over Geffcken et al. Applicant further notes that these reasons for patentability of claim 36 in view of Geffcken et al. also apply to herein amended claims 43 and 71 (and claims dependent thereon), which claims the Examiner indicated would be allowable.

In view of the foregoing, Applicants respectfully request withdrawal of the rejections of (i) claims 36 and 50 under 35 U.S.C. 102(b), and (ii) claims 37-42 and 51-56 under 35 U.S.C. 103(a).

### IV. Conclusion

In view of the above amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Entry of the proposed amendment is respectfully solicited. Reconsideration and withdrawal of the Examiner's rejections is

respectfully requested and allowance of all pending claims is respectfully submitted.

If any outstanding issues remain, or if the Examiner has any suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number below.

#### **AUTHORIZATION**

The Assistant Commissioner is hereby authorized to charge any additional fees which may be required for this amendment, or credit any overpayment to Deposit Account 13-4500, Order No. 1232-4046US2.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Assistant Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. 13-4500, Order No. 1232-4046US2. A DUPLICATE OF THIS SHEET IS ATTACHED.

Respectfully submitted,

Morgan & Finnegan, L.L.P.

Date: <u>August 1, 2000</u>

David V. Rossi

Reg. No. 36,659

**MAILING ADDRESS:** 

MORGAN & FINNEGAN, L.L.P. 345 Park Avenue New York, New York 10154 (212) 758-4800 Telephone (212) 751-6849 Facsimile